

2.2.3.2 Alternative 2A2 (Dismissed From Further Consideration)

Alternative 2A2 included a far west Jefferson bypass corridor. From the south limits of the Central Segment, this alternative would have followed the existing alignment of the Fort Atkinson bypass with the addition of two lanes and median within the existing right-of-way. The alternative would have left the existing Fort Atkinson bypass alignment about 3.9 miles (6.3 km) south of Jefferson near Banker Road. Heading north, the alternative would have crossed USH 18 between STH 89-North and STH 89-South, and returned to the existing STH 26 alignment about 2.1 miles (3.4 km) north of Jefferson near Biederman Drive. Interchanges were proposed near Banker Road to the south, at USH 18 to the west, and at Jefferson Road to the north. After joining the existing alignment north of Jefferson, this alternative continued north, adding two lanes and a median to the existing roadway before matching the four-lane improvement at Johnson Creek near CTH Y.

The only significant difference between Alternative 2A2 and Alternative 2A1 was the location of the Rock River crossing and the north interchange. All associated impacts of Alternative 2A1 discussed above were very similar to Alternative 2A2. Little or no local support was shown. Other preliminary alternatives existed that met the purpose and need requirements for this project and had fewer environmental disturbances. This alternative was dismissed from further consideration.

2.2.3.3 Alternative 2B (Dismissed From Further Consideration)

Alternative 2B included a near west Jefferson bypass corridor closer to Jefferson, except for the southern interchange. From the south limits of the Central Segment, this alternative would have followed the existing alignment of the Fort Atkinson bypass with the addition of two lanes and a median within the existing right-of-way. The alternative would have left the existing Fort Atkinson bypass alignment about 4.5 miles (7.3 km) south of Jefferson near Banker Road. Heading north, the alternative would have crossed USH 18 about 0.5 miles (0.8 km) east of STH 89-South, and returned to the existing STH 26 alignment about 1.1 miles (1.8 km) north of Jefferson near Jahn Lane. Interchanges were proposed at USH 12 and Hoard Road to the south, at USH 18 to the west, and near Junction Road to the north of Jefferson.

After joining the existing alignment north of Jefferson, this alternative would have continued north adding two lanes and a median to the existing roadway before matching the four-lane improvement at Johnson Creek near CTH Y.

Although Alternative 2B would have provided a favorable north interchange location, the south interchange location would not have served the City of Jefferson or the industrial parks. Similar alternatives 2C and 2D offered a better south interchange location and fewer natural environment impacts. Alternative 2B received little or no local support. Other preliminary alternatives existed that met purpose and need requirements for this project with fewer environmental disturbances. This alternative was dismissed from further consideration.

2.2.3.4 Alternative 2C (Carried Forward as Detailed Study Alternative C1) (see [Exhibit 6](#))

Alternative 2C includes a near west Jefferson bypass corridor. From the south limits of the Central Segment, this alternative follows the existing alignment of the Fort Atkinson Bypass with the addition of two lanes and a median to the existing roadway (within the existing right-of-way) until it heads off on relocation. The alternative leaves the existing alignment about 2.3 miles (3.6 km) south of Jefferson at Business 26. Heading north, the alternative crosses USH 18 about 0.5 miles (0.8 km) east of STH

89-South, and returns to the existing STH 26 alignment about 1.1 miles (1.8 km) north of Jefferson near Jahn Lane. Diamond interchanges are proposed at Business 26 to the south, CTH W to the southwest, USH 18 to the west, and Junction Road to the north. Structures over the Crawfish River and Rock River would be required.

After joining the existing alignment north of Jefferson, this alternative continues adding two lanes and a median to the existing roadway before matching the four-lane improvement at Johnson Creek near CTH Y. Grade separation structures are proposed at the Union Pacific Railroad tracks and CTH Y. At-grade intersections are proposed at Biederman Drive and Jefferson Road.

Alternative 2C provides interchange locations that serve the City of Jefferson and the industrial parks. As Jefferson and Fort Atkinson continue to expand towards each other, Alternative 2C allows existing STH 26 to become a local road connecting these communities. STH 26 would have freeway access control standards from south of Fort Atkinson to north of Jefferson. In order to reduce impacts to wetlands and floodplains near the Crawfish River, this alternative was modified to include a river crossing farther west of Jefferson. This alternative met the purpose and need requirements for this project and was carried forward for detailed study as Alternative C1.

2.2.3.5 Alternative 2D (Carried Forward as Detailed Study Alternative C2) (see [Exhibit 6](#))

Alternative 2D is a near west Jefferson bypass corridor that utilizes more of the existing STH 26 corridor alignment between Fort Atkinson and Jefferson. From the south limits of the Central Segment, this alternative follows the existing alignment of the Fort Atkinson Bypass and existing STH 26 between Fort Atkinson and Jefferson with the addition of two lanes and a median to the existing roadway until it heads off on relocation. This alternative leaves the existing alignment about 1.5 miles (2.4 km) south of Jefferson. It then parallels existing STH 26 before heading west and crossing over the Union Pacific Railroad tracks about 0.8 miles (1.3 km) south of Jefferson. Heading northerly, the alternative crosses USH 18 about 0.5 miles (0.8 km) east of STH 89-South, and returns to the existing STH 26 alignment about 1.1 miles (1.8 km) north of Jefferson near Jahn Lane. Proposed interchanges include a trumpet west of the Union Pacific Railroad tracks to the south, a diamond at USH 18 to the west, and a diamond at a realignment of Junction Road to the north of Jefferson. Structures over the Crawfish River and Rock River would be required.

After joining the existing alignment north of Jefferson, this alternative continues northerly adding two lanes and a median to the existing roadway before matching the four-lane improvement at Johnson Creek near CTH Y. Grade separation structures are proposed at the Union Pacific Railroad tracks and CTH Y. At-grade intersections are proposed at Biederman Drive and Jefferson Road.

Alternative 2D also provides interchange locations that serve the City of Jefferson and the industrial parks, and it minimizes impacts to farmland as compared with Alternative 2C. The corridor passes through a floodplain near the Crawfish River. This alternative maximizes the use of the existing corridor; and, in doing so, this alternative does not provide a local road connection between Jefferson and Fort Atkinson. This alternative met the purpose and need requirements for this project and was carried forward for detailed study as Alternative C2.

2.2.3.6 Alternative 2E (Alternative C5) (Dismissed From Further Consideration)

Alternative 2E would have followed existing STH 26 through the City of Jefferson. A location map through Jefferson is shown on [Figure 2.2.3.6](#). Within the city, major features along STH 26 include the Main Street Commercial Historic District. This NRHP district encompasses over 40 structures on 12

blocks in Jefferson's traditional downtown. Twenty-five of the contributing buildings are located adjacent to existing STH 26. The Jefferson Public Library, also on the NRHP, is adjacent to existing STH 26, as are eight other potentially eligible historic sites. The Jefferson County Courthouse, Jefferson City Hall, a portion of the traditional downtown, and numerous residential and commercial buildings are all adjacent to existing STH 26.

Alternative 2E would have followed the existing highway alignment from the Fort Atkinson bypass to CTH Y in the City of Johnson Creek, passing through the City of Jefferson. From the south limits of the Central Segment to the south corporate limits of Jefferson, this alternative would have incorporated the addition of two lanes and a median to the existing roadway. A four-lane divided urban arterial roadway would have followed the existing corridor through the City of Jefferson. Within the city, access would have been controlled and the number of access points substantially reduced. Many public road intersections would have been closed and driveway access allowed only along frontage roads. Additionally, parking would have been eliminated along the highway. The posted speed limit would have been 45-mph (73-km/h) to maintain a desirable operating speed of 40-mph (65-km/h).

From the north corporate limits of Jefferson, this alternative would have continued north, adding two lanes and a median to the existing roadway before matching the four-lane improvement at Johnson Creek near CTH Y.

The through town alternative in the City of Jefferson was studied on a continuous basis during much of the STH 26 Corridor Study. This alternative was studied in more detail than other preliminary alternatives that were dismissed to more thoroughly understand and weigh the associated impacts and to provide as much time as possible for the public to review and comment on the alternative. The alternative was shown and discussed with study committees throughout most of the study. Alternative 2E was shown at the first public information meeting in June 1999 and impacts are shown on [Table 2.2.3](#). After this meeting, Alternative 2E was renamed as Alternative C5 and shown at a second public information meeting in January 2000. Impacts for Alternative C5 are shown on [Table 2.2.4.5](#).

Alternative 2E (C5) would have maximized the use of the existing corridor, resulting in low impacts to farmland and the natural environment near Jefferson, and would have had the lowest cost. The through town alternative in Jefferson would have been subject to Section 4(f) considerations. The potential impacts on the historic resources, including the Main Street Commercial Historic District and the other nine historic sites, were sufficient to conclude that the alternatives carried forward for detailed study (C1, C2, C3, and C4) were feasible and prudent alternatives to the through town alternative. In addition, the residential and business relocations with a through town alternative were considered significant.

This alternative was not carried forward as one of the alternatives for detailed study because it would have had a number of adverse impacts in the City of Jefferson and because it would not have met project purpose and need requirements on a number of issues as described below.

- **Operating Speeds and Travel Time:** Given the regional importance of STH 26, an alternative that meets the purpose and need for this project must maintain a reasonable average operating speed (~40-mph (65-km/h) urban, ~55-mph (89-km/h) rural). Intersections that remain open for 4-way traffic movement would require a signal for safe and effective operations. A through town alternative in Jefferson would have required four signalized intersections thereby reducing the average operating speed through town to about 30-mph (48-km/h). With low operating speeds, this alternative does not meet the purpose and need as an effective regional transportation facility. Low operating speeds and

STH 26 -- JANESVILLE TO WATERTOWN ROCK, JEFFERSON & DODGE COUNTIES
THROUGH-TOWN ALTERNATIVE 2E (C5) CITY OF JEFFERSON
FIGURE 2.2.3.6

increased travel time results in increased pollution and fuel consumption. This alternative does not meet the project purpose and need requirement of reducing congestion and travel time.

- **Truck Volumes:** As a designated truck route, STH 26 also needs to be improved as an effective and safe truck route. Reducing truck volumes within the City of Jefferson has been an important concern to local residents throughout the study. This alternative does not reduce truck traffic in the city and does not meet the project purpose and need as an efficient and safe state truck route.
- **Crashes:** High traffic and truck volumes are a safety concern to motorists and pedestrians within the city. The crash rate on STH 26 within the City of Jefferson exceeded the statewide average crash rate in four of the five years from 1994 to 1998. STH 26 in Jefferson was improved in 1999 as a 2-lane facility with turn lanes. As traffic volumes continue to increase, the potential for crashes increases. Pedestrian crossings also become increasingly dangerous in downtown areas where pedestrian volumes are typically the highest. This alternative would not meet the project purpose and need of enhancing highway safety on STH 26.
- **Community Circulation:** A major route with high traffic volumes through the center of Jefferson is disruptive to the internal circulation of the community. With the reduction of cross streets along STH 26 that would have occurred with this alternative, traffic would have been required to circulate to signalized intersections to cross the route. This would have resulted in increased delays on side streets due to the concentration of vehicles at signalized intersections. This alternative would have reduced the access to residential and commercial properties along the route. Traffic circulation to the school complexes and the county fairgrounds on the west side of Jefferson would have become more difficult from the east side. Alternative 2E (C5) does not meet the project purpose and need of accommodating the local access transportation needs of the community.

Below are other issues raised by the through-town alternative:

- **Historic Sites:** Jefferson's history is encompassed in the historic buildings within the city, many of which are along STH 26. With the construction of an alternative through town, many of these buildings would be destroyed or adversely affected. Twenty-five buildings that contribute to the Main Street Commercial Historic District (NRHP) are adjacent to existing STH 26 and would be adversely impacted by this alternative. Also, nine potentially historic structures in addition to the historic district would be adversely impacted by this alternative.
- **Local Support:** Through town alternatives have been discussed many times with local communities at study committee and public information meetings. In March of 2000, the Jefferson Chamber of Commerce expressed written support for a bypass (see Appendix A). In April of 2000, the City of Jefferson passed a resolution supporting the construction of a bypass (see Appendix A). Minimal favorable support has been shown by the way of verbal and written comments received for a through town alternative.
- **Relocations:** This alternative requires a widening of the existing STH 26 corridor, and would require an estimated total of 118 relocations of which approximately 113 are within the City of Jefferson causing significant disruption of the community.
- **Environmental Issues:** The through town alternative would require a four-lane Rock River crossing in Jefferson and a Section 404 permit for discharge of dredged or fill material.

- **Noise:** Traffic noise, trucks in particular, would impact properties along STH 26 in a narrow corridor through Jefferson's central area. In urban areas where traffic and pedestrian access is important to businesses and homes along the route, a noise barrier would not be practical or effective.
- **Access:** Driveways and side street access disrupt the flow of traffic and present a major safety concern on high volume routes. Crossing or entering traffic on STH 26 at uncontrolled intersections becomes increasingly dangerous as traffic volumes increase on STH 26. In order to provide a safe and efficient transportation system, access at driveways would be eliminated or substantially reduced in number, and side streets would be restricted to either right-in/right-out or eliminated completely. Traffic would be routed to signalized intersections to allow safer movements for left-turns and crossing traffic. With an increase in traffic at intersections, pedestrian crossings would become more difficult and hazardous. Parking, particularly in downtown areas, would become increasing difficult. These factors would result in adverse community impacts on residents and businesses located along the STH 26 corridor.

2.2.3.7 Alternative 2F (Carried Forward as Detailed Study Alternative C3) (see [Exhibit 6](#))

Alternative 2F includes a near east Jefferson bypass corridor. From the south limits of the Central Segment, this alternative follows the existing alignment of the Fort Atkinson Bypass and existing STH 26 with the addition of two lanes and a median to the existing roadway until it heads off on relocation. The alternative leaves the existing alignment 0.8 miles (1.3 km) south of Jefferson. Heading east and north, the alternative crosses USH 18 about 1,000 feet (305 m) west of CTH Y, and returns to the existing STH 26 alignment about 0.8 miles (1.3 km) north of Jefferson near the Glacial Drumlin Trail. Proposed interchanges include a trumpet to the south, a partial cloverleaf at USH 18 to the east, and a diamond at Junction Road to the north of Jefferson. A structure over the Rock River would be required.

After joining the existing alignment north of Jefferson, this alternative continues northerly adding two lanes and a median to the existing roadway before matching the four-lane improvement at Johnson Creek near CTH Y. Grade separation structures are proposed at the Union Pacific Railroad tracks and CTH Y. At-grade intersections are proposed at Biederman Drive and Jefferson Road.

This alternative has relatively low floodplain and wetland impacts. This can be attributed to east side alternatives requiring only one river crossing (Rock River) as compared to two river crossings (Rock River and Crawfish River) for west side alternatives. Alternative 2F maximizes the use of the existing corridor and requires the lowest amount of right-of-way acquisition (381 acres; 154 ha) of the bypass alternatives. Interchanges are located close to the City of Jefferson and their industrial parks. This alternative passes through and near property owned by St. Coletta's. This alternative met the purpose and need requirements for this project and was carried forward for detailed study as Alternative C3.

2.2.3.8 Alternative 2G (Dismissed From Further Consideration)

Alternative 2G included a near east Jefferson bypass extending north on relocation along CTH Y. This alternative followed the Alternative 2F alignment from the south limits of the Central Segment to just north of USH 18 east of Jefferson. The alternative then would have headed northeasterly along the CTH Y corridor north until matching the four-lane improvement at Johnson Creek near CTH Y.

The north interchange would not have served the City of Jefferson as well as similar Alternative 2F. This alternative passed through and near property owned by St. Coletta's. Due to the length of route on relocation, local jurisdictions would have incurred increased maintenance costs as a significant length of

existing STH 26 would remain. Alternative 2G would have impacted a greater number of farms (43) as compared to Alternative 2F (34). Other preliminary alternatives existed that met the purpose and need requirements for this project with fewer environmental disturbances. This alternative was dismissed from further consideration.

2.2.3.9 Alternative 2H (Carried Forward as Detailed Study Alternative C4) (see [Exhibit 6](#))

Alternative 2H is a far east Jefferson bypass corridor that extends northerly on relocation along the CTH Y corridor. From the south limits of the Central Segment, this alternative follows the existing alignment of the Fort Atkinson Bypass with the addition of two lanes and a median to the existing roadway (within the existing right-of-way) until it heads off on relocation. The alternative leaves the existing STH 26 alignment heading east about 2.3 miles (3.7 km) south of Jefferson, and crosses the Rock River. Heading north, the alternative crosses USH 18 about 0.8 miles (1.3 km) east of CTH Y, joining the CTH Y alignment near Junction Road. Continuing north, the alternative follows the CTH Y alignment until it matches the four-lane improvement at Johnson Creek near CTH Y. Diamond interchanges are proposed at Business 26 to the south, USH 18 to the east, and existing STH 26 to the north of Jefferson. Grade separation structures are proposed at CTH K, Buena Vista Road, CTH N, Vogel Road, CTH Y, Hopen Road, Town Line Road, Junction Road, Marsh Road, Glacial Drumlin Trail, and Wright Road. Between Junction Road and Wright Road, a frontage road is proposed. A structure over the Rock River is required.

Alternative 2H has a high impact to farmland and requires a large amount of right-of-way acquisition. Traffic circulation under this alternative is not desirable since traffic on USH 18 between the City of Jefferson and the interchange at STH 26 will be routed past the St. Coletta's establishment through a narrow right-of-way section. In order to compare alternatives that impact property owned by St. Coletta's, a second east avoidance alternative was carried forward. This alternative has since been modified to follow the alignment of Alternative 2F south of Jefferson before heading further east at the southeast corner of Jefferson. The corridor would run parallel to the west of CTH Y north of Jefferson. Alternative 2H, as modified, met the purpose and need requirements for this project and was carried forward for detailed study as Alternative C4.

2.2.4 North Segment (Segment 3)

The north segment preliminary alternatives are described below. See [Figure 2.2.4](#) for map locations of the preliminary alternatives, and [Table 2.2.4](#) for a summary of estimated impacts.

2.2.4.1 Alternative 3A (Dismissed From Further Consideration)

Alternative 3A included a far west Watertown bypass corridor. From the south limits of the North Segment, this alternative would have followed the existing STH 26 alignment with the addition of two lanes and a median to the existing roadway. The alternative would have left the existing alignment about 2.8 miles (4.5 km) south of Watertown near Emerald Drive, crossed STH 19 approximately 1,500 feet (460 m) west of CTH K, and returned to the existing alignment 3.6 miles (5.8 km) north of Watertown near CTH JM. Interchanges were proposed at Ebenezer Road to the south, STH 19 to the west, and Five Mile Road to the north of Watertown. After joining the existing alignment north of Watertown, this alternative would have continued north, adding two lanes and a median to the existing roadway until reaching the northern project terminus at STH 60-East.

Alternative 3A would have had approximately 665 acres (269 ha) of farmland impacts, the highest of the west bypass alternatives. The interchanges would have been located about five miles from the City of

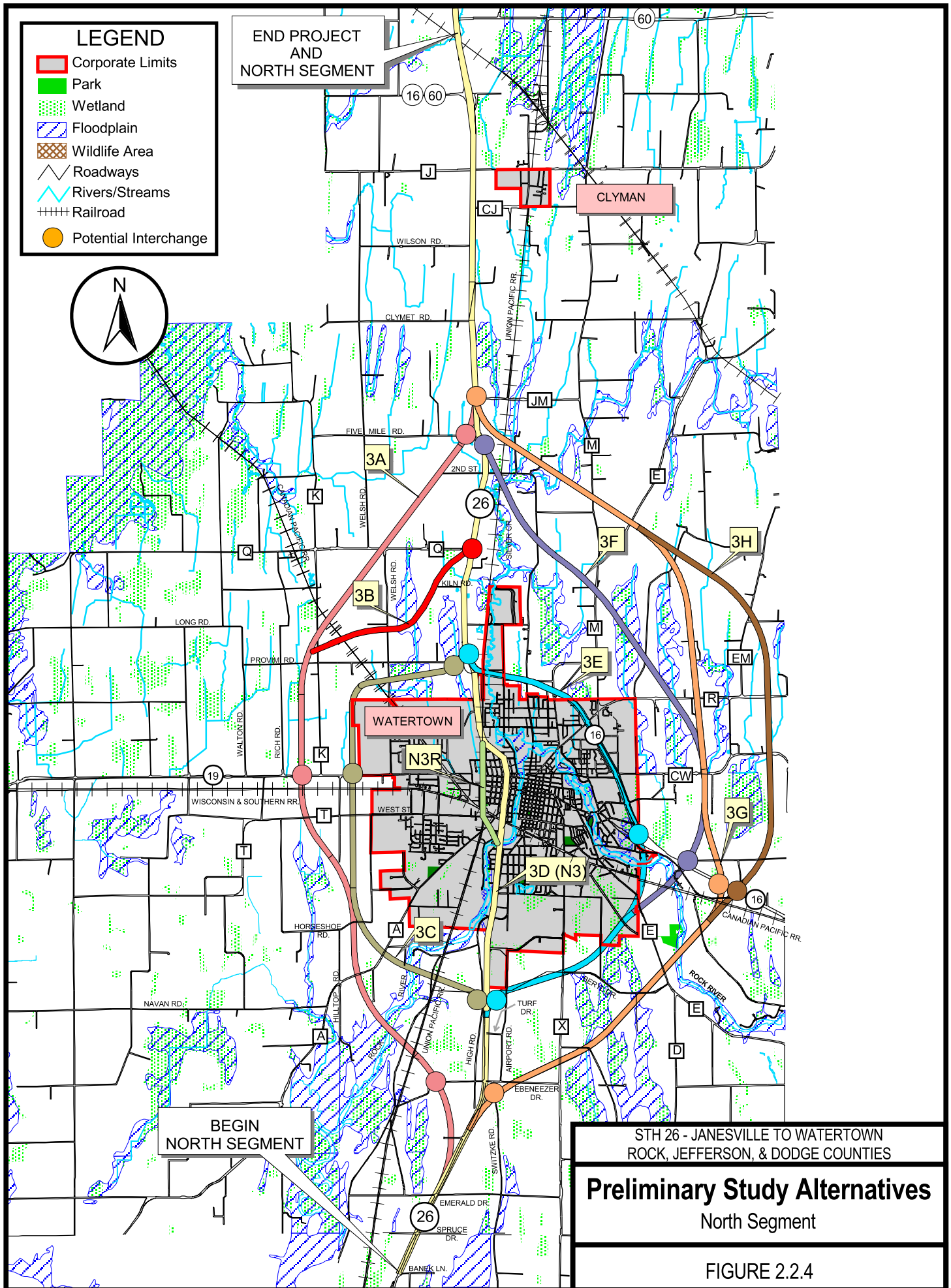


TABLE 2.2.4
SUMMARY OF ESTIMATED IMPACTS FOR PRELIMINARY ALTERNATIVES (June 1999*)
NORTH SEGMENT: JOHNSON CREEK TO WATERTOWN

Study Issues	Unit of Measure	Alternatives								
		3A	3B	3C (N1)*	3D (N3)*	3E (N2)*	3F	3G	3H	N3R*
Agricultural Issues										
Number of Farms Affected	Each	31	38	32	27	20	24	34	43	
Farmland Area Converted to Right-of-Way	Acres (Hectares)	665 (269)	615 (249)	563 (228)	220 (89)	427 (173)	616 (249)	695 (281)	746 (302)	
Environmental Issues										
Wetland Area Converted to Right-of-Way	Acres (Hectares)	53 (22)	45 (18)	53 (22)	14 (6)	34 (14)	85 (34)	64 (26)	71 (29)	
Flood Plain Area	Low/Med/High	Med	Med	Med	Low	Med	High	High	High	
New River/Stream Crossing Locations	Number	1	2	3	0	1	3	4	4	
Historic Properties	Yes/No	No	No	No	Yes	No	No	No	No	
Archaeological Potential	Low/Med/High	Low	Low	Low	Low	Low	Med	Med	Low	
Endangered Species	Yes/No	No	No	No	No	No	No	No	No	
Land Use and Socioeconomic Issues										
Consistency with Municipal Land Use Plans	○○●	●	●	○	●	○	●	●	●	
Significant Site Specific Impacts	○○●	○	○	○	●	○	○	○	○	See
Farmland Preservation Effect	○○●	●	●	○	○	○	●	●	●	Table
Community Access	○○●	●	●	○	○	○	○	●	●	2.2.4.5
Economic Effect on Existing Businesses	○○●	●	●	○	●	○	○	●	●	for
Servicing of Industrial Parks	○○●	○	○	○	○	○	●	●	●	impacts.
Residential-Neighborhood Effect	○○●	○	○	○	●	●	○	○	○	
Traffic										
-- North of STH 19										
Projected STH 26 2028 Average Daily Traffic (ADT) ⁽¹⁾	Vehicles/Day	8,500	9,000	12,500	26,000	22,000	11,500	11,000	11,000	
Estimated ADT Reduction Through Watertown (2028)	Percent	30 - 35	30 - 40	45 - 55	0	25 - 35	25 - 35	25 - 35	25 - 35	
Estimated Truck Volume Reduction Through Watertown	Percent	45 - 50	45 - 50	45 - 50	0	40 - 45	40 - 45	40 - 45	40 - 45	
Number of Thru Lanes Required Through Watertown ⁽²⁾	Existing / Required	2 / 2 ⁽³⁾	2 / 2 ⁽³⁾	2 / 2 ⁽³⁾	4-div / 4-div	2 / 2 ⁽³⁾	2 / 2 ⁽³⁾	2 / 2 ⁽³⁾	2 / 2 ⁽³⁾	
-- South of STH 19										
Projected STH 26 2028 Average Daily Traffic (ADT) ⁽¹⁾	Vehicles/Day	11,000	11,500	12,000	37,000	9,000	8,000	7,500	7,500	
Estimated ADT Reduction Through Watertown (2028)	Percent	25 - 35	30 - 35	30 - 35	0	20 - 30	20 - 25	15 - 25	15 - 25	
Estimated Truck Volume Reduction Through Watertown	Percent	45 - 50	45 - 50	45 - 50	0	40 - 45	40 - 45	40 - 45	40 - 45	
Number of Thru Lanes Required Through Watertown ⁽²⁾	Existing / Required	4-div / 4-div	4-div / 4-div	4-div / 4-div	4-div / 4-div	4-div / 4-div	4-div / 4-div	4-div / 4-div	4-div / 4-div	
Other Issues										
Total Length	Miles (km)	18.3 (29.5)	18.4 (7.5)	19.1 (7.7)	17.2 (7.0)	19.5 (7.9)	19.5 (7.9)	19.7 (8.0)	20.9 (8.5)	
Total Area Converted to Right-of-Way	Acres (Hectares)	723 (293)	665 (269)	621 (251)	314 (127)	466 (189)	706 (286)	764 (309)	822 (333)	
Relocations (Business/Residential)	Each	15-20	20-25	10-15	180-200	30-35	40-45	20-25	20-25	
Preliminary Cost (1999 Dollars)	Million \$	\$72	\$70	\$70	\$72	\$70	\$75	\$81	\$84	

* Impacts shown in chart were computed in June 1999 for the preliminary alternatives. Impacts may be different in other charts due to additional information known at a later date.

Preliminary Alternative 3D(N3) was studied longer than other preliminary alternatives that were dismissed (See Table 2.2.4.5). Alternative N3R was developed subsequent to June 1999 (See Table 2.2.4.5 for impacts). Alternatives 3C(N1) and 3E(N2) were carried forward as Detailed Study Alternatives (See Table 2.3.3).

(1) ADT shown is at or near the midpoint of projected ADT range along the bypass alternatives or along the existing alignment alternatives.

(2) Represents the number of lanes along existing STH 26 versus the number of lanes required to obtain LOS "D" along the existing route with the construction of each alternative.

(3) Requires four lanes from Main Street to Cady Street.

- most beneficial/least negative effect
- moderate
- least beneficial/most negative effect

Note: Symbols represent a relative scale from most beneficial/least negative effect to least beneficial/most negative effect. Each preliminary alternative is classified relative to the other preliminary alternative within the same segment of the corridor.

Watertown and their industrial parks. Due to the length of route on relocation, local jurisdictions would have incurred increased maintenance costs as a significant length of existing STH 26 would become a local road. Alternative 3A had little or no local support. Other preliminary alternatives existed that met the purpose and need requirements for this project with fewer environmental disturbances. This alternative was dismissed from further consideration.

2.2.4.2 Alternative 3B (Dismissed From Further Consideration)

Alternative 3B included a far west Watertown bypass corridor. This alternative followed the Alternative 3A alignment from the south limits of the North Segment to Provimi Road. North of Provimi Road, Alternative 3B headed east and northeast, returning to the existing alignment 1.6 miles (2.6 km) north of Watertown near CTH Q. Interchanges were proposed at Ebenezer Road to the south, STH 19 to the west, and CTH Q to the north of Watertown. After joining the existing alignment north of Watertown, this alternative continued north, adding two lanes and a median to the existing roadway until the northern project terminus at STH 60-East.

Alternative 3B had negative impacts similar to those of Alternative 3A. The location of the north interchange closer to Watertown was the only benefit of this alternative compared to Alternative 3A. This alternative had little or no local support. Other preliminary alternatives existed that met the purpose and need requirements for this project with fewer environmental disturbances. This alternative was dismissed from further consideration.

2.2.4.3 Alternative 3C (Carried Forward as Detailed Study Alternative N1) (see [Exhibit 7](#))

Alternative 3C includes a near west Watertown bypass corridor. The bypass corridor is within the approved Watertown urban service area boundaries. From the south limits of the North Segment, this alternative follows the existing alignment of STH 26 with the addition of two lanes and a median to the existing roadway until it heads off on relocation. The alternative leaves the existing alignment about 0.5 miles (0.8 km) south of Watertown near Turf Drive, crosses STH 19 approximately 2000 feet (610 m) east of CTH K, and returns to the existing alignment at the north corporate limits of Watertown at the existing STH 26/STH 16 interchange. This is the only alternative that provides a direct bypass connection for both STH 26 and STH 19 to the STH 16 interchange and offers free-flow movement to STH 16-East. Proposed interchanges are a trumpet near Turf Drive to the south, a diamond at STH 19 to the west, and a cloverleaf at STH 16 to the north of Watertown. A structure over the Rock River would be required.

After joining the existing alignment north of Watertown, this alternative continues northerly adding two lanes and a median to the existing roadway until the northern project terminus at STH 60-East.

Alternative 3C would have the fewest farmland impacts of the west bypass alternatives. Interchanges are located close to the City of Watertown and its industrial parks. The connection with the STH 16 bypass north of Watertown provides a distinct traffic system benefit to the area for traffic wanting to avoid downtown. West of Watertown, this alternative offers an efficient route to the Watertown hospital located along the STH 16 bypass. Alternative 3C has received favorable local support. This alternative met the purpose and need requirements for this project, and was carried forward for detailed study as Alternative N1.

2.2.4.4 Alternative 3D (Alternative N3) (Dismissed From Further Consideration)

Alternative 3D would have followed existing STH 26 through the City of Watertown. A location map through the city of Watertown is shown on [Figure 2.2.4.4](#). Within the city, major features along STH 26

include a crossing of the Rock River, significant historic properties, numerous residential and commercial properties, and numerous side road intersections. Two separate historic districts are located north and south of STH 19 adjacent to STH 26. These historic sites are identified as the North Washington Historic District with 35 buildings adjacent to STH 26, and the South Washington Historic District with 14 buildings adjacent to STH 26. In addition to these two historic districts, four other historic sites, including the St. Bernard Catholic Church complex at the intersection of STH 19 and STH 26, are adjacent to existing STH 26. St. Henry Cemetery is located along the east side of STH 26 near the entrance to the Watertown High School on the north side of Watertown.

From the south limits of the North Segment to the south corporate limits of Watertown, Alternative 3D would have followed the existing STH 26 alignment with the addition of two lanes and a median to the existing roadway.

A four-lane divided urban arterial roadway would have followed the existing corridor through Watertown. Access would have been controlled with signalized intersections located only at Air Park Drive, Jefferson Road (CTH Y), Boomer Street, Omena Street, Bernard Street, Milwaukee Street, Main Street (STH 19), Elm Street, and Spaulding Street. Spaulding Street would have been extended west to connect with Endeavor Drive. Right-turn lanes and single or dual left-turn lanes would have been provided at all intersections. Right-in/right-out access would have been provided at Stimpson Street, Cady Street, and Union Street-South. Additionally, parking would have been prohibited, and driveway access provided along frontage roads only. The posted speed limit would have been 45-mph (73-km/h) to maintain a desirable operating speed of 40-mph (65-km/h).

From the north corporate limits of Watertown to the northern project terminus at STH 60-East, this alternative would have followed the existing alignment of STH 26 with the addition of two lanes and a median to the existing roadway. A modification of the existing STH 16/STH 26 trumpet interchange would have been required. STH 60-East would have been realigned to connect with STH 60-West at a proposed diamond interchange. Frontage roads would have been required at certain locations to maintain the minimum 500-foot (153-m) spacing between driveway access along the highway. The existing alignment would have been reconstructed to meet the 70-mph (113-km/h) design standard for a rural highway.

The through town alternative in the City of Watertown was studied on a continuous basis during the STH 26 Corridor Study. This alternative was studied in more detail than other preliminary alternatives that were dismissed earlier to more thoroughly understand and weigh the associated impacts and to provide as much time as possible for the public to review and comment on the alternative. The alternative was shown and discussed with study committees throughout most of the study. Alternative 3D was shown at the first public information meeting in June 1999 and impacts are shown on [Table 2.2.4](#). After this meeting, Alternative 3D was renamed as Alternative N3 and shown at a second public information meeting in January 2000. Impacts for Alternative N3 are shown on [Table 2.2.4.5](#).

Alternative 3D (N3) would have maximized the use of the existing corridor, resulting in low impacts to farmland and the natural environment near Watertown, and would have had a lower cost. The through town alternative in Watertown would be subject to Section 4(f) considerations. The potential impacts on the historic resources, including the two historic districts and the other four historic sites, were sufficient to conclude that the alternatives carried forward for detailed study (N1 and N2) were feasible and prudent alternatives to the through town alternative. In addition, the residential and business relocations and community impacts with a through town alternative were considered significant.

This alternative was not carried forward as one of the alternatives for detailed study because it would not have met project purpose and need requirements in a number of ways as described below and because it would have had a number of adverse impacts within the City of Watertown.

- **Operating Speeds and Travel Time:** Given the regional function and importance of STH 26, an alternative that meets the purpose and need for this project must maintain a reasonable average operating speed (~40-mph (65-km/h) urban, ~55-mph (89-km/h) rural). Intersections that remain open for 4-way traffic movement would require a signal for safety and effective operations. A through town alternative in Watertown would have required nine signalized intersections, thereby reducing the average operating speed through town to less than 25-mph (40-km/h). With low operating speeds, this alternative does not meet the purpose and need as an efficient regional facility. Low operating speeds and increased travel time results in increased air pollution and fuel consumption. This alternative does not meet the project purpose and need of reducing congestion and travel time.
- **Truck Volumes:** As a designated truck route, STH 26 also needs to be improved as an efficient and safe truck route. Reducing truck volumes within the City of Watertown has been an important concern to city and town residents throughout the study. This alternative does not reduce truck traffic in the city and does not meet the project purpose and need as an efficient and safe state truck route.
- **Crashes:** High traffic and truck volumes are a safety concern to motorists and pedestrians within the city. The crash rate on STH 26 within the City of Watertown exceeded the statewide average crash rate from 1994 to 1998. As traffic volumes continue to increase, the potential for crashes increases. Pedestrian crossings also become increasingly dangerous in downtown areas where pedestrian volumes are typically the highest. This alternative does not meet the project purpose and need of enhancing highway safety on STH 26.
- **Community Circulation:** A major route with high traffic volumes through the center of Watertown is disruptive to the internal circulation of the community. With the reduction of cross streets along STH 26 that would occur with this alternative, traffic would have been required to circulate to signalized intersections to cross the route. This would have resulted in increased delays on side streets due to the concentration of vehicles at signalized intersections. STH 26 is the major north-south road in Watertown, and this alternative would have reduced the access to residential and commercial properties along the route, again causing disruptive circulation within the community. Alternative 3D (N3) does not meet the project purpose and need of accommodating the local access transportation needs of the community.

Below are other issues raised by the through-town alternative:

- **Historic Sites:** Watertown's history is encompassed in the historic buildings within the city, many of which are along STH 26. With the construction of a through-town alternative, all of many historic buildings along STH 26 would be adversely affected or destroyed. Forty-nine buildings within two historic districts along STH 26, and four other historic sites including the St. Bernard Catholic Church complex, would be adversely impacted, with some sites destroyed by this alternative.
- **Local Support:** Through town alternatives have been discussed many times with local communities at study committee and public information meetings. The City of Watertown passed a resolution supporting the construction of a bypass.

- **Relocations:** This alternative requires a widening of the existing STH 26 corridor, and would require an estimated total of 156 relocations of which approximately 133 are within the City of Watertown causing significant disruption of the community.
- **Environmental Issues:** The through town alternative would require a Rock River crossing and a Section 404 permit for discharge of dredged or fill material.
- **Noise:** Traffic noise, trucks in particular, would impact properties along STH 26 within the City of Watertown. In urban areas where traffic and pedestrian access is important to businesses and homes along the route, a noise barrier would not be practical or effective. This alternative would not reduce traffic noise within the city.
- **Access:** Driveways and side street access disrupt the flow of traffic and present a major safety concern on high volume routes. Crossing or entering traffic on STH 26 at uncontrolled intersections becomes increasingly dangerous as traffic volumes increase on STH 26. In order to provide a safe and efficient transportation system, access at driveways and side streets would be restricted to either right-in/right-out or eliminated completely. Traffic would be routed to signalized intersections to allow safer movements for left-turns and crossing traffic.

2.2.4.5 Alternative N3R (Dismissed From Further Consideration)

A second through town alternative that partially followed a railroad corridor in the City of Watertown was developed based on discussions with a Study Committee member at a Town of Watertown meeting in December 1999. A location map showing Alternative N3R through the city of Watertown is shown on [Figure 2.2.4.5](#). Since this alternative was developed after the first Public Information Meeting (PIM) in June 1999, it was shown to the general public at the second PIM in January 2000 as Alternative N3R, and was shown and discussed at later Study Committee meetings in the north segment.

This alternative would have followed the same alignment described above in Alternative 3D (N3) from Baneck Lane to the Rock River in Watertown. At the Rock River bridge the alignment would have turned northwest, crossing the Canadian Pacific Railroad and the Union Pacific Railroad. The corridor would have then turned north and paralleled the Union Pacific Railroad before rejoining the existing alignment near Spaulding Street. At-grade signalized intersections along the relocated route were proposed at CTH A, STH 19, and existing STH 26 near Spaulding Street. North of the STH 26/STH 16 interchange this alternative would have followed the same alignment as Alternative 3D (N3).

This alternative was studied in approximately the same level of detail as the alternatives retained for detailed study in order to compare its associated impacts to other detailed study alternatives, and to provide as much time as possible for study committee members and the public to review and comment on the alternative. Impacts for the rail corridor Alternative N3R are shown on [Table 2.2.4.5](#). This alternative would also be subject to Section 4(f) historic considerations due to historic resources along the rail corridor.

Alternative N3R would have maximized the use of the existing corridor, resulting in low impacts to farmland and the natural environment near Watertown. It would have avoided many of the historic resources that were adjacent to the existing STH 26 alignment between Bernard Street and Spaulding Street, but would have had an adverse impact on historic resources along the rail corridor.

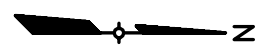
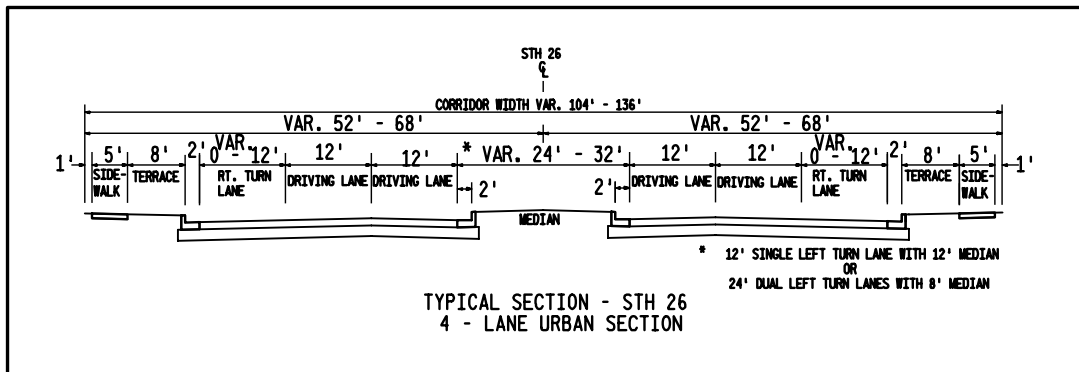
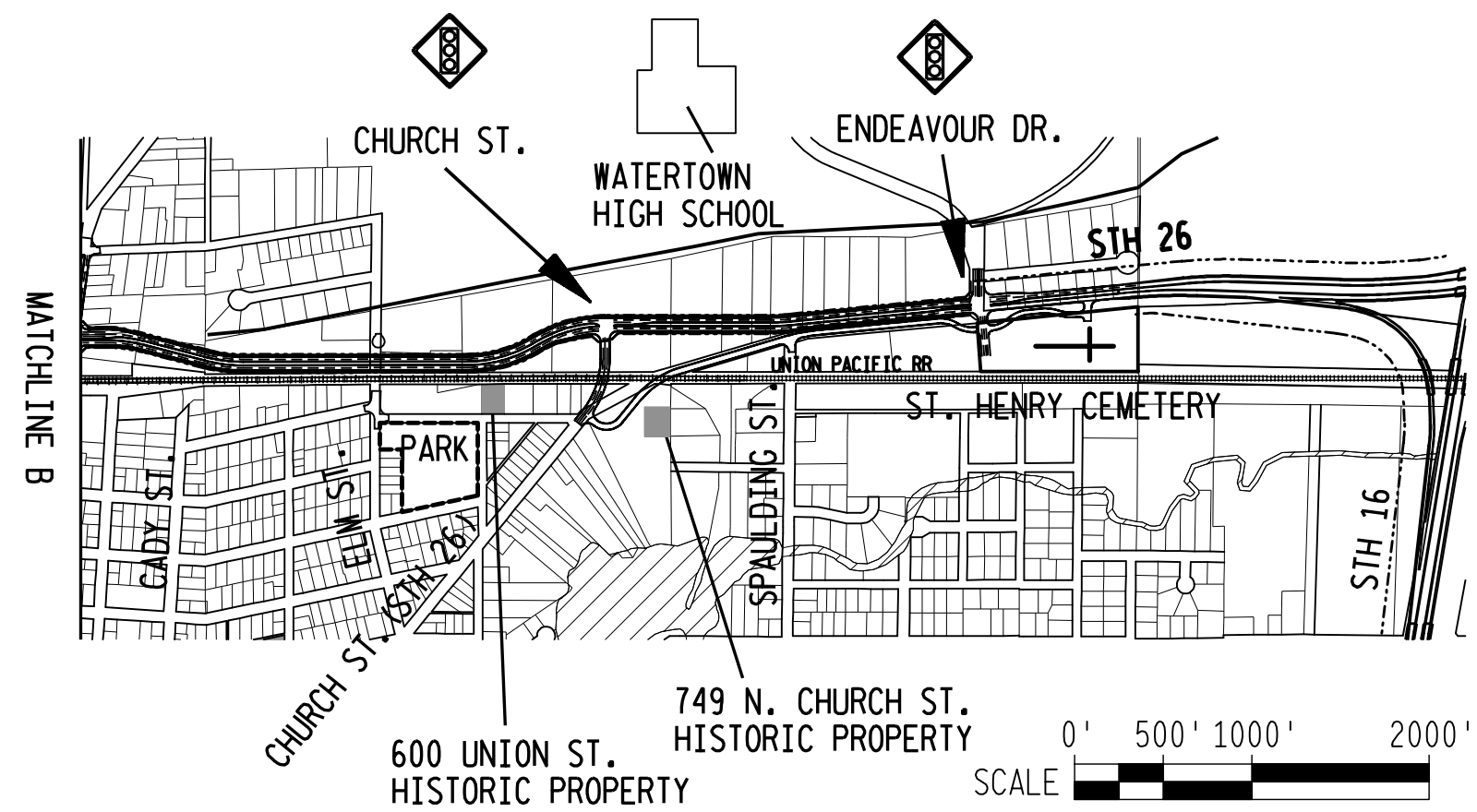
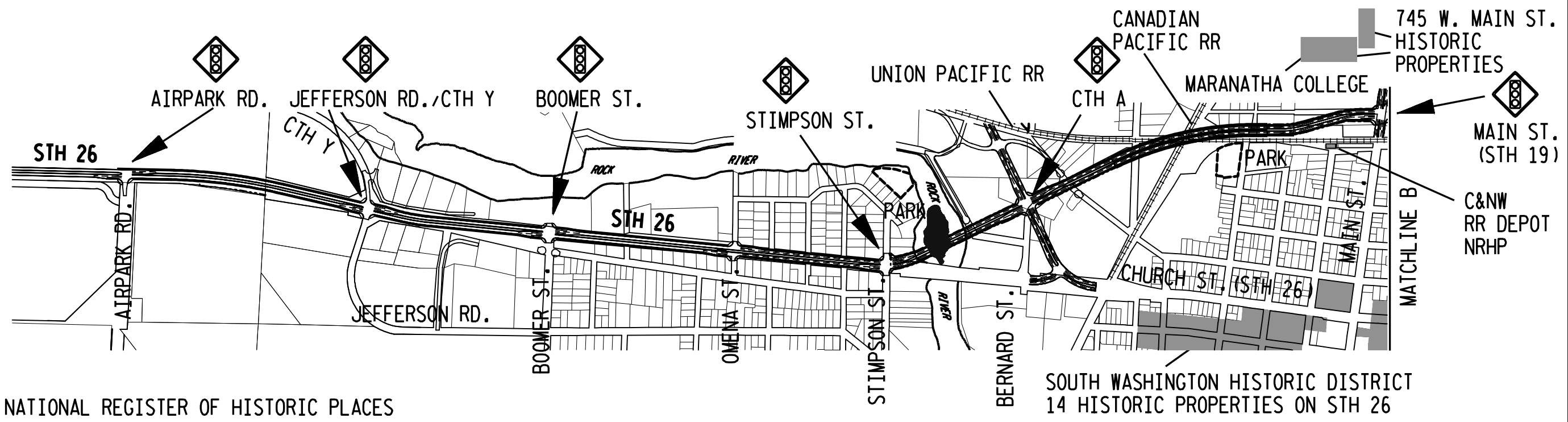
This alternative was not carried forward as one of the alternatives for detailed study, even though it was studied in approximately the same level of detail as other detailed study alternatives, because it would have had a number of adverse impacts within the City of Watertown and because it would not have met project purpose and need requirements in a number of ways as described below.

- **Truck Volumes:** As a designated truck route, STH 26 also needs to be improved as an efficient and safe truck route. Reducing truck volumes within the City of Watertown has been an important concern to city and town residents throughout the study. Between 3,900 and 4,700 daily trucks are forecasted along STH 26 within the City of Watertown by the year 2028. Low operating speeds and increased travel time would have resulted in increased pollution and fuel consumption. This alternative does not reduce truck traffic in the city and does not meet the project purpose and need as an efficient and safe state truck route
- **Operating Speeds:** Given the regional importance of STH 26, an alternative that meets the purpose and need for this project must maintain a reasonable average operating speed (~40-mph (65-km/h) urban, ~55-mph (89-km/h) rural). Intersections that remain open for 4-way traffic movements would require a signal for safety and effective operation. A through town rail corridor alternative in Watertown would have required nine signalized intersections. While each individual intersection movement would operate at LOS D or better, it would not have been possible to provide progressive traffic flow between all the signals for STH 26 through traffic. At CTH A and STH 19 intersections most STH 26 traffic would have had to stop, thereby reducing the average operating speed through town to about 25-mph (40-km/h), with operating speeds on some segments as low as 18-mph (29-km/h).

The concept of removing signals to increase operating speed along the route was examined, but found to offer minimal improvement in overall operating speed. The intersections at CTH A and STH 19 are major high-volume routes and major access points to the community, and need to remain in order to provide important access to the community. As described above, the operating speed in the areas of these two intersections is about 18 mph (29 km/h). Safe access to and from STH 26 can only be accomplished at signalized intersections due to the high traffic volumes. Removal of a signal from any location to reduce the number of signals also would remove that location as a local access point, and would force traffic wanting community access to travel to the next signalized intersection. The additional turning movement traffic forced to disperse to another signalized intersection would have potential to overload the capacity of that intersection causing further delays. There would have been no significant time benefit associated with a reduction in the number of traffic signalized intersections. Although this alternative may be effective as a local arterial, it does not meet the purpose and need as an efficient regional facility.

Travel Time: The rail corridor alternative would have had an estimated 300,000 hours per year increased travel time compared to a near west bypass alternative. This additional travel time is caused by the lower posted speed of 45-mph (73-km/h) and the inability of drivers to travel at the posted speed due to congestion and traffic signals as discussed above. Speed changes and delays associated with congestion, signal spacing, or signal timing would have increased vehicle operating costs for fuel and oil consumption, tire wear, and maintenance. There would also have been increased air pollution due to the stopping, starting, and idling of vehicles compared to the free flow on the bypass alternatives. The cost of the increased travel time on the railroad corridor would have been \$12,000 per day or \$4.4 million a year, not including the additional cost of vehicle operation. This alternative does not meet the project purpose and need of reducing congestion and travel time.

WATERTOWN RAIL CORRIDOR ALTERNATIVE - N3R

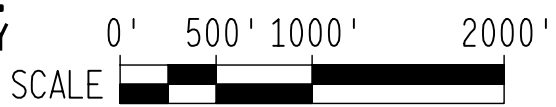


STH 26 -- JANESVILLE TO WATERTOWN
ROCK, JEFFERSON & DODGE COUNTIES

RAILROAD CORRIDOR ALTERNATIVE N3R
CITY OF WATERTOWN

FIGURE 2.2.4.5

85 RELOCATIONS



EARTH TECH COMPUTER AIDED DESIGN & DRAFTING

SCALE = 1/8"=100'-00" (2000)

PROJECT NO. 1390-04-00

DATE: 2014-07-14

PROJECT: WATERTOWN RAIL CORRIDOR ALTERNATIVE N3R

PROJECT LOCATION: WATERTOWN, WISCONSIN

PROJECT DESCRIPTION: RAILROAD CORRIDOR ALTERNATIVE N3R

PROJECT OWNER: WISCONSIN DEPARTMENT OF TRANSPORTATION

PROJECT FUNDING: STATE OF WISCONSIN

PROJECT STATUS: PRELIMINARY DESIGN

PROJECT TEAM: EARTH TECH COMPUTER AIDED DESIGN & DRAFTING

PROJECT LEAD: JEFFREY L. HARRIS

PROJECT MANAGER: JEFFREY L. HARRIS

PROJECT ENGINEER: JEFFREY L. HARRIS

PROJECT DRAFTER: JEFFREY L. HARRIS

PROJECT CHECKER: JEFFREY L. HARRIS

PROJECT REVIEWER: JEFFREY L. HARRIS

PROJECT APPROVER: JEFFREY L. HARRIS

PROJECT SUBMITTER: JEFFREY L. HARRIS

PROJECT DATE: 2014-07-14

PROJECT LOCATION: WATERTOWN, WISCONSIN

PROJECT DESCRIPTION: RAILROAD CORRIDOR ALTERNATIVE N3R

PROJECT OWNER: WISCONSIN DEPARTMENT OF TRANSPORTATION

PROJECT FUNDING: STATE OF WISCONSIN

PROJECT STATUS: PRELIMINARY DESIGN

PROJECT TEAM: EARTH TECH COMPUTER AIDED DESIGN & DRAFTING

PROJECT LEAD: JEFFREY L. HARRIS

PROJECT MANAGER: JEFFREY L. HARRIS

PROJECT ENGINEER: JEFFREY L. HARRIS

PROJECT DRAFTER: JEFFREY L. HARRIS

PROJECT CHECKER: JEFFREY L. HARRIS

PROJECT REVIEWER: JEFFREY L. HARRIS

PROJECT APPROVER: JEFFREY L. HARRIS

PROJECT SUBMITTER: JEFFREY L. HARRIS

**TABLE 2.2.4.5
SUMMARY OF ESTIMATED IMPACTS FOR THROUGH TOWN PRELIMINARY ALTERNATIVES (April 2000*)**

Study Issues	Unit of Measure	South Segment	Central Segment	North Segment	
		S1	C5	N3	N3R
Route Length	Miles (km)	13.3 (21.4)	17.6 (28.3)	17.8 (28.6)	17.5 (28.2)
Land Conversions					
Total Land Converted to Right-of-Way	Acres (Hectares)	147 (60)	90 (37)	315 (128)	292 (118)
Farmland Area Converted to Right-of-Way	Acres (Hectares)	106 (43)	55 (22)	215 (87)	215 (87)
Woodland Area Converted to Right-of-Way	Acres (Hectares)	4 (2)	2 (1)	1 (0.4)	1 (0.4)
Other Area Converted to Right-of-Way	Acres (Hectares)	32 (13)	28 (11)	69 (28)	69 (28)
Environmental Issues					
Wetland Area Converted to Right-of-Way	Acres (Hectares)	5 (2)	5 (2)	15 (6)	7 (3)
Flood Plain Impact	Low/Med/High	Low	Low	Low	Low
New River/Stream Crossing Locations	Number	1	1	1	1
Historic Properties within Area of Potential Effect	Number	10	35	54	5
Archaeological Potential	Low/Med/High	Med	Low	Med	Med
	No. Sites	5	1	5	5
Real Estate					
Total Relocations	Each	32	118	156	85
Land Use and Socioeconomic Issues					
Agricultural Impacts	○○●	○	○	○	○
Consistency with Local and County Land Use Plans	○○●	●	●	●	●
Significant Site Specific Institutional Impacts	○○●	●	●	●	●
Economic Impact on Existing Businesses	○○●	○	●	●	●
Servicing of Industrial Sites	○○●	○	●	●	●
Residential-Neighborhood Impacts	○○●	●	●	●	○
Community Access	○○●	●	●	○	○
Traffic					
		North of STH 59	North of USH 18	North of STH 19	
Projected STH 26 2028 Average Daily Traffic (ADT) ⁽¹⁾	Vehicles/Day	18,500	28,000	26,000	9000 ⁽³⁾
Estimated ADT Reduction Through Town (2028)	Percent	0	0	0	30 - 40 ⁽³⁾
Estimated Truck Volume Reduction Through Town	Percent	0	0	0	50 - 60 ⁽³⁾
Number of Thru Lanes Required Through Town ⁽²⁾	Existing / Required	2 / 4-div	2 / 4-div	2 / 4-div	2 / 4-div
		South of STH 59	South of USH 18	South of STH 19	
Projected STH 26 2028 Average Daily Traffic (ADT) ⁽¹⁾	Vehicles/Day	25,000	31,000	37,000	13500 ⁽³⁾
Estimated ADT Reduction Through Town (2028)	Percent	0	0	0	30 - 40 ⁽³⁾
Estimated Truck Volume Reduction Through Town	Percent	0	0	0	50 - 60 ⁽³⁾
Number of Thru Lanes Required Through Town ⁽²⁾	Existing / Required	2 / 4-div	2 / 4-div	4-div / 4-div	4-div / 4-div
Average Vehicle Operating Speed Through Urban Area	Miles per Hour (km/h)	30 (48)	30 (48)	25 (40)	25 (40)
Estimated Cost (2000 Dollars)					
Construction	Million \$	\$27	\$43	\$54	\$61
Real Estate	Million \$	\$5	\$7	\$11	\$14
Total Cost	Million \$	\$32	\$50	\$65	\$75

WisDOT Project ID 1390-04-00

* Some impacts shown are different than impacts computed on preliminary alternatives chart due to additional study and information known at a later date.

- (1) ADT shown is at or near the midpoint of projected ADT range along the bypass alternatives or along the existing alignment alternatives.
- (2) Represents the number of lanes along existing STH 26 versus the number of lanes required to obtain LOS "D" along the existing route with the construction of each alt.
- (3) ADT volume, ADT reduction, and truck volume reduction only apply from CTH A to south of Spaulding Street. Urban ADT volumes outside of this boundary would be 28,000 south of USH 18 and 14,000 north of USH 18 with no reduction of ADT or truck volumes from existing STH 26.

- most beneficial/least negative effect
- moderate
- least beneficial/most negative effect

Note: Symbols represent a relative scale from most beneficial/least negative effect to least beneficial/most negative effect. Each alternative is classified relative to the other alternative within the same segment of the corridor.

- **Crashes:** High traffic and truck volumes are a safety concern to motorists and pedestrians within the city. The crash rate on STH 26 within the City of Watertown greatly exceeded the statewide average crash rate from 1994 to 1998. As traffic volumes continue to increase, the potential for crashes increases. Pedestrian crossings and riding bicycles would become increasingly dangerous in downtown areas where pedestrian and bike volumes are typically the highest. With STH 26 moved to a bypass alignment, the predicted combined total number of crashes on the existing STH 26 alignment and the bypass route would be 30 to 35 crashes a year less, 25 percent less, than the predicted combined total number of crashes on the existing STH 26 and rail corridor alignments. In addition, there would be a decrease of 10 to 15 crashes per year on STH 19 if STH 19 was relocated from Main Street to the bypass. This alternative does not meet the project purpose and need of enhancing highway safety on STH 26.
- **Community Circulation:** A major route with high traffic volumes through the center of Watertown is disruptive to the internal circulation of the community. With the reduction of cross streets along STH 26 that would have occurred with this alternative, traffic would have been required to circulate to signalized intersections to cross the route, thereby resulting in increased delays on side streets due to the concentration of vehicles at signalized intersections. The large residential area north of Main Street and west of the railroad corridor would have been effectively left with only one entrance with the closing of Elm Street to either all turns or all left turns at the railroad corridor. It would have been more difficult to reach Church Street and STH 26 from West Street since West Street would no longer have directly connected to Church Street or STH 26. The combination of increased intersection delays at STH 26 and a more limited street system could have resulted in increased emergency service times to certain areas of the city. The rail corridor alternative would have used some of the limited amount of land that is owned by Maranatha College in an area that is planned for future expansion of their facility, and would have caused disruption to students traveling to and from the college in nearby housing. Alternative 3D (N3R) does not meet the project purpose and need of accommodating the local access transportation needs of the community.

Below are other issues raised by the through-town alternative:

- **Historic Properties:** Along the rail corridor alternative there are five sites either eligible or potentially eligible for the NRHP. These include the Maranatha Baptist Bible Church which has two contributing buildings and four noncontributing buildings, the Chicago & Northwestern Railroad Depot, an industrial building on Union Street, and Slight's Standard Oil Filling Station near Kiln Road. All of these historic properties would be adversely impacted with the construction of a rail corridor through town alternative.
- **Local Support:** Through town alternatives have been discussed many times with local communities at study committee and public information meetings. On May 18, 2000, the Town of Watertown expressed support for the rail corridor through town alternative (see Appendix A). The City of Watertown does not support the rail corridor through town alternative (see Appendix A). Minimum support has been shown by the way of verbal and written comments received for a through town alternative.
- **Relocations:** This alternative would require an estimated total of 85 relocations of which approximately 61 are within the City of Watertown causing significant disruption of the community. The majority of the business relocations are along the rail corridor. A row of 4-unit apartment complexes located along existing STH 26 on the north side of Watertown accounts for 32 of the

residential relocations. The remaining residential relocations are along the rail corridor and south and north of Watertown.

- **Land Conversions:** The rail corridor has substantially less land converted to right-of-way because the route primarily follows the existing STH 26 corridor. This alternative requires approximately half the amount of farmland, wetland, and total land converted to right-of-way as compared to alternatives N1 and N2.
- **Environmental Issues:** Seven acres (2.8 ha) of wetland are impacted by this alternative as compared to 17 acres (6.9 ha) for N1 and 22 acres (8.9 ha) for N2. The rail corridor through town alternative would require a new four lane Rock River crossing in the City of Watertown and a Section 404 permit for discharge of dredged or fill material, as would alternatives N1 and N2.
- **Noise:** Traffic noise, trucks in particular, would impact properties along STH 26 and along the rail corridor within the City of Watertown. In urban areas where traffic and pedestrian access is important to businesses and homes along the route, a noise barrier would not be practical or effective. This alternative would not reduce traffic noise within the city.
- **Access:** Driveways and side street access disrupt the flow of traffic and present a major safety concern on high volume routes. Crossing or entering traffic on STH 26 at uncontrolled intersections becomes increasingly dangerous as traffic volumes increase on STH 26. In order to provide a safe and efficient transportation system, access at driveways and side streets would be restricted to either right-in/right-out turns or eliminated completely. Traffic would be routed to signalized intersections to allow safer movements for left-turns and crossing traffic. This alternative would reduce the access to residential and commercial properties along the route.
- **Costs:** Although the estimated construction cost of this alternative is lower than the bypass alternatives, the higher real estate cost of this alternative offsets this advantage. The rail corridor alternative is estimated to cost \$75 million as compared to Alternatives N1 and N2 costing \$74 million and \$79 million, respectively. Business and residential relocation costs are not included in the above estimates.

2.2.4.6 Alternative 3E (Carried Forward as Detailed Study Alternative N2) (see [Exhibit 7](#))

Alternative 3E includes a near east Watertown bypass corridor along the existing STH 16 bypass corridor in the northeast portion of the city. The bypass corridor is within the approved Watertown urban service area boundaries. From the south limits of the North Segment, this alternative follows the existing alignment of STH 26 with the addition of two lanes and a median to the existing roadway until it heads off on relocation. The alternative leaves the existing alignment heading easterly about 0.5 miles (0.8 km) south of Watertown near Turf Drive. It joins STH 16 near Gopher Hill Road and then follows the existing STH 16 corridor to the northwest, returning to the existing STH 26 alignment near the north corporate limits of Watertown at the existing STH 26/STH 16 interchange. Proposed interchanges are a diamond at Airport Road to the south, a trumpet at STH 16 to the east, half-diamonds at Oak Hill Road and at CTH R along existing STH 16, and a trumpet at the existing STH 26/STH 16 interchange to the north of Watertown. Existing at-grade intersections along STH 16 would no longer be permitted. A structure over the Rock River would be required.

From the north corporate limits of Watertown to the northern project terminus at STH 60-East, this alternative follows the existing STH 26 alignment with the addition of two lanes and a median to the existing roadway.

Alternative 3E would minimize impacts to the natural environment by connecting to the STH 16 bypass corridor. This alternative would have the fewest farmland impacts of all the bypass alternatives. South of Watertown, this alternative would offer an efficient route to the Watertown hospital located along the STH 16 bypass. This alternative would not serve truck traffic generated from the west side industrial park. The addition of two lanes to the STH 16 bypass would be required to handle the increased traffic volumes. This alternative met the purpose and need requirements for this project and was carried forward for detailed study as Alternative N2.

2.2.4.7 Alternative 3F (Dismissed From Further Consideration)

Alternative 3F included an east Watertown bypass corridor. It followed the Alternative 3E alignment from the south limits of the North Segment to CTH E. The alternative then curved farther east, crossing STH 16 near Gopher Hill Road, and then headed north returning to the existing STH 26 alignment about 2.6 miles (4.2 km) north of Watertown near Second Street. Interchanges were proposed at Airport Road to the south, at STH 16 to the east, and at Second Street to the north of Watertown. After joining the existing alignment north of Watertown, this alternative would have continued north, adding two lanes and a median to the existing roadway until the northern project terminus at STH 60-East.

Alternative 3F had the greatest wetland impacts (approximately 85 acres; 34 ha) of all bypass alternatives. The north interchange would not have served the City of Watertown. This alternative impacts approximately 190 more acres (77 ha) of farmland than would Alternative 3E. Other preliminary alternatives existed that met the purpose and need requirements for this project with less environmental disruptions. This alternative was dismissed from further consideration.

2.2.4.8 Alternative 3G (Dismissed From Further Consideration)

Alternative 3G included a far east Watertown bypass corridor. From the south limits of the North Segment, this alternative would have followed the existing STH 26 alignment with the addition of two lanes and a median to the existing roadway. This alternative would have left the existing alignment heading easterly about 1.7 miles (2.7 km) south of Watertown near Ebenezer Drive. It would have crossed STH 16 approximately 3,000 feet (915 m) east of the Rock River and returned to the existing STH 26 alignment about 3.6 miles (5.8 km) north of Watertown near CTH JM. Interchanges were proposed near Ebenezer Drive to the south, at STH 16 to the east, and at CTH JM to the north of Watertown. From there, this alternative would have continued north, adding two lanes and a median to the existing roadway until the northern project terminus at STH 60-East.

Alternative 3G would have had severe wetland and floodplain impacts. Compared to Alternative 3E, this alternative would have impacted approximately 270 more acres (109 ha) of farmland and was estimated to cost \$11 million more. The north and south interchanges would not have served the City of Watertown and their industrial parks. Alternative 3G had little or no local support. Due to the length of route on relocation, local jurisdictions would have incurred increased maintenance costs as a significant length of existing STH 26 would become a local road. Other preliminary alternatives existed that met the purpose and need requirements for this project with less environmental disruptions. This alternative was dismissed from further consideration.

2.2.4.9 Alternative 3H (Dismissed From Further Consideration)

Alternative 3H included a far east Watertown bypass corridor. This alternative would have followed the Alternative 3G alignment from the south limits of the North Segment until the Canadian Pacific Railroad tracks east of Watertown. The alternative would have then continued farther east, crossing STH 16 approximately 4,000 feet (1,220 m) east of the Rock River, and then headed north, returning to the existing STH 26 alignment about 3.6 miles (5.8 km) north of Watertown near CTH JM. From there, this alternative would have continued north, adding two lanes and a median to the existing roadway until the northern project terminus at STH 60-East.

This alternative would have impacted the greatest amount of farmland, approximately 746 acres (302 ha). Impacts to wetlands and floodplains were also high along this corridor. Alternative 3H was estimated to cost \$14 million more than Alternative 3E. This route had the longest overall length and required approximately 822 acres (333 ha) of right-of-way acquisition. Due to the length of route on relocation, local jurisdictions would have incurred increased maintenance costs, as a significant length of existing STH 26 would become a local road. This alternative had little or no local support. Other preliminary alternatives existed that met the purpose and need requirements for this project with less environmental disruptions. This alternative was dismissed from further consideration.

2.2.5 Other Alternatives Considered

Other alternatives were considered at the request of agencies or interest groups. Due to the associated impacts or lack of support, these alternatives were dismissed from further consideration and were not evaluated as preliminary alternatives.

South Segment -- Alternative S4 (Dismissed From Further Consideration)

After the DEIS was published, a new alternative was studied at the request of the WDNR. An alternative similar to Alternative S3 but passing through the Oak Ridge and Bonny Meade golf courses was developed to reduce possible impacts to the Storrs Lake Wildlife Area. After further review, the WDNR concluded that the distance the alignment was moved from the wildlife area was not significant and that further private development along the corridor would be more detrimental than a highway. Based on input from the WDNR and the public, this new alternative was dropped from further consideration.

North Segment -- Alternative N3RF (Dismissed From Further Consideration)

Following publication of the DEIS, comments received at the Public Hearing and at a local Study Committee meeting prompted the development and study of a new through-town freeway alternative (access permitted only at interchange locations) that partially followed a railroad corridor in the City of Watertown. In January 2001, a Public Information Meeting was held in Watertown and was attended by 505 individuals. Although the Freeway Railroad Corridor Alternative (N3RF) was the shortest route, it had adverse impacts including a large number of relocations and high cost as compared to the bypass alternatives. In addition, the vast majority of respondents were in opposition to the Alternative N3RF, including the major local institutions and businesses. This alternative was dismissed from further consideration.

North Segment -- Alternative N2 Modified (Dismissed From Further Consideration)

Subsequent to the dismissal of the Freeway Railroad Corridor Alternative, the Town of Watertown requested further development and analysis of an alternative (N2 Modified) that would have bypassed Watertown to the east of existing STH 16. A similar bypass preliminary alternative was studied earlier in the project and was dismissed from further consideration due to its associated impacts. Alternative N2 Modified differed from the previous preliminary alternative in the location where it would have reconnected to the existing highway north of Watertown. It was studied in a similar level of detail as the bypass alternatives N1 and N2, with the exception of archaeological, air and noise studies, in order to compare its associated impacts to the other viable alternatives, and to provide more time for Study Committee members to review and comment on the alternative.

Alternative N2 Modified would have included a far east Watertown bypass corridor extended east of the existing USH 16 bypass corridor in the northeast portion of the city. From the south limits of the North Segment, this alternative would have followed the same alignment as Alternative N2 until crossing the Rock River east of the city. It then would have crossed STH 16 near Gopher Hill Road and continued north until crossing CTH R. The alternative would then have headed west and returned to the STH 26 alignment near the existing STH 16/STH 26 interchange on the north side of the city. After joining the existing alignment north of Watertown, this alternative would have continued north following the same alignment as Alternative N2.

Alternative N2 Modified, in comparison to Detailed Study Alternatives N1 and N2, had the greatest route length. It was 2.6 miles (4.2 km) longer than Alternative N1, and 0.5 miles (0.8 km) longer than Alternative N2. Alternative N2 Modified had the greatest wetland impacts (approximately 48 acres; 19.4 ha) of all bypass alternatives, impacting twice the amount of wetland ac/ha as either Alternatives N1 or N2. Alternative N2 Modified had the greatest residential relocation impacts, affecting 33 homes as compared to 17 and 25 for N1 and N2 respectively. Other detailed study alternatives existed that met the purpose and need requirements for this project with less environmental disruptions. This alternative was dismissed from further consideration.

2.3 ALTERNATIVES RETAINED FOR DETAILED STUDY

Eight improvement alternatives plus a No-Build alternative were carried forward for detailed study. The eight detailed study improvement alternatives are generally refinements, variations, or combinations of the preliminary alternatives. A different naming convention was used to avoid confusion between preliminary alternatives and detailed study alternatives. [Table 2.1.4](#) shows the relationship between the preliminary alternatives and the detailed study alternatives.

Through-town alternatives for the cities of Milton, Jefferson, and Watertown were studied in greater detail than other preliminary alternatives. They were studied on a continuous basis until after the second public information meetings in January 2000. These alternatives were studied in more detail than other preliminary alternatives that were dismissed to study the associated impacts in more detail and to provide a longer time for the public to review and comment on the alternatives. The through-town alternatives were studied and presented to study committees and at public information meetings including the January 2000 public information meetings. The more detailed analysis conducted for the through-town alternatives in Milton (Alternative 1D, later renamed S1), Jefferson (Alternative 2E, later renamed C5), and Watertown (Alternative 3D, later renamed N3) resulted in the conclusion that these alternatives failed to meet the purpose and need requirements for this project, and had a number of impacts within those communities that were adverse. In addition to not meeting the purpose and need requirements for this

project, each of the through-town alternatives would have been subjected to Section 4(f) considerations due to the extensive historic resources within each community that would have been adversely impacted. For these reasons, the through-town alternatives (S1, C5, and N3) were dismissed from further consideration, and were not carried forward as a detailed study alternative. These alternatives are described in more detail in section 2.2.1.4, Preliminary Alternatives. Impacts for the through town alternatives are shown on Table 2.2.4.5.

In Watertown, a second through-town alternative that partially follows a railroad corridor was developed based on discussions with a Study Committee member at a Town of Watertown meeting in December 1999. This alternative is described in more detail in section 2.2.4.5 Alternative N3R. Since this alternative was developed after the first public information meeting in June 1999, it was shown to the general public at the second public information meeting in January 2000 as Alternative N3R, and was also shown and discussed at the later Study Committee meetings in the north segment. This alternative was studied in approximately the same level of detail as the alternatives retained for detailed study in order to compare its associated impacts to other detailed study alternatives, and to provide a longer time for the public to review and comment on the alternative. The detailed analysis conducted for this rail corridor through-town alternative resulted in the conclusion that the alternative failed to meet the purpose and need requirements for this project. Impacts for Alternative N3R are shown on Table 2.2.4.5. This alternative would also have been subjected to Section 4(f) considerations due to historic resources along the rail line. Because it failed to meet the purpose and need requirements for this project, the rail corridor through-town alternative was ultimately not retained as a detailed study alternative even though it was studied in approximately the same level of detail as the alternatives retained for detailed study.

2.3.1 Description of No-Build Alternative

Under the No-Build alternative, improvements to the STH 26 corridor would primarily consist of maintenance activities or spot improvements that attempt to maintain current service levels. Generally, the rural section of roadways, including the Ft. Atkinson bypass, would remain a two-lane rural roadway with no change in access. The exception to this is the rural section between Janesville and Milton, which was reconstructed as a four-lane divided rural highway in 1999. Urban sections of roadway in Milton, Jefferson, and Watertown (north of STH 19) would remain as two-lane urban roadways with some parking and turn lanes. The urban section of Johnson Creek between CTH Y and Baneck Lane was reconstructed as a four-lane divided roadway in 2001-2002, and the urban section of Watertown south of STH 19 was reconstructed as a four-lane urban roadway in 2003. There would be minimal change in access in any of the urban communities.

According to the WisDOT's facilities development guidelines, a rural 2-lane roadway generally falls below LOS "C" when traffic volumes exceed 8,700 ADT on facilities with 12-foot (3.6 meters) wide driving lanes and 10 percent trucks. Currently, 90 percent of the rural segments within the 48-mile (77-km) study corridor have traffic volumes exceeding 8,700 ADT, and all have greater than 9 percent truck volumes. By 2028, almost all rural segments are projected to exceed the 8,700 ADT threshold by two to four times.

WisDOT's facilities development guidelines states that a 2-lane urban roadway falls below LOS "C" at 8,000 to 20,000 ADT depending on the design characteristics of the roadway. Currently, both Jefferson and Watertown have traffic volumes within this range. By 2008, both Jefferson and Watertown are estimated to have segments in excess of the 20,000 ADT threshold. By 2028, all urban segments within the study corridor will meet or exceed the ADT threshold.

As a result of the high traffic volumes, capacity of the existing roadway can not achieve an acceptable level of service. The majority of segments will operate at LOS “E” or LOS “F” in the design year 2028, which is characterized by long backups and delay causing driver frustration and forced vehicle maneuvers. The STH 26 corridor will not operate efficiently if no improvements are made to the existing roadway. Traffic will likely divert to local road systems in the cities and townships resulting in increased safety problems in the corridor and adjacent local road systems.

A high number of existing access points, particularly in urban areas, along with the high traffic and truck volumes, contribute to crash potential. From 1994 to 1998, the STH 26 corridor had a number of segments with higher than average crash rates (see Section 1.3.5). It is likely that crash frequency will increase if no improvements are made to the existing roadway.

While the No-Build alternative would include spot improvements, these type and magnitude of improvements will not be able to keep pace with the increasing traffic demands placed on this highway. Level of service will continue to deteriorate as traffic volumes grow, and the number of crashes will continue to remain high. Because of the mix of local and through traffic in urban communities of Milton, Jefferson, and Watertown, traffic delays and back-ups would continue to occur at signalized intersections and side roads, particularly during peak hours. Relatively unimpeded traffic flow with an operating speed of 55-65 mph (89-105 km/h) in rural areas and 40-mph (65-km/h) in urban areas would not be achievable with a No Build alternative given the high traffic volumes and high number of access points.

Existing STH 26 within the City of Jefferson was reconstructed in 1999. This urban section operates as a two-lane roadway with 12-foot (3.6 m) driving lanes, with some sections having additional width to accommodate turn lanes and on-street parking. This recent reconstruction represents the extent of improvement within the community that can be accomplished without adversely impacting side road and driveway accesses, historic resources, business and residential relocations, and community circulation patterns.

The existing roadways in the urban communities would become even more congested than today. This congestion would cause hardship to the local mobility, limiting the public’s access to businesses, schools, and other parts of the community. Because STH 26 is the major north-south route in Jefferson and Watertown, police, fire, ambulance and school bus service, increased congestion in these areas would hinder these services. Increasing traffic volumes passing through urban areas on a regional facility such as STH 26 can impair residential neighborhoods and business districts, historic properties and community facilities and require the removal of on-street parking. As development continues to grow in and around the corridor, an unimproved two-lane roadway in Milton and Jefferson and the proposed 4-lane plan in Watertown would not be able to accommodate the resulting new development.

The No-Build Alternative, while having fewer environmental impacts such as land acquisition and relocations, would not be consistent with the *Corridors 2020* plan and its intended highway function as a route of national, state, regional and local importance. STH 26 would not function effectively as a regional highway, and regional traffic would increasingly use less congested local and county roads. The utility of STH 26 for transporting goods to regional, statewide, and national destinations would decline. For these reasons, the No-Build Alternative would not meet the purpose and need requirements of this project. It is carried forward as a detailed study alternative to serve as a baseline for comparison of Build Alternatives and for evaluation of their environmental impacts.

2.3.2 Description of Build Alternatives

Each of the detailed study improvement alternatives evaluated in this EIS consists of upgrading the existing two-lane roadway to a four-lane divided rural highway. The general concept is to utilize the existing highway corridor to the extent practical, with bypasses of communities where necessary to maintain constant highway speed and to avoid impacts to historic sites and excessive relocations.

Freeway access control standards (access allowed only at interchanges) would be implemented along the bypass portions of the route. It is further proposed for the rural portions of STH 26 between the bypasses that expressway standards be applied. This would mean that public road at-grade intersections and private driveways would be allowed at safe locations that meet spacing guidelines. It would be the goal of WisDOT to minimize the number of at-grade public intersections and private driveways. This would be accomplished by consolidation, grade separation of certain public roads from STH 26, or constructing an interchange at selected busy intersections. Once a preferred alternative is selected, and before final roadway design is undertaken, WisDOT proposes to work with local units of government and adjacent property owners to determine what access modifications would need to be made.

The location of the rural highway alignment will shift from one side of the existing roadway to the other in order to minimize impacts through the already occupied corridor. This type of alignment was selected as the best means to avoid or minimize adverse effects to natural resources, such as wetlands, woodlands, and farmlands, as well as minimize effects related to property severances, relocations, and conversion of other lands for highway purposes.

The location of the highway alignment in bypass areas was generally closer in to a community and within approved urban service area boundaries rather than farther out to avoid or minimize adverse effects to natural resources and farmlands. Efforts were made to minimize effects related to property severances, relocations, and conversion of lands for highway purposes.

WisDOT's facilities development guidelines indicate that capacity improvements for a two-lane rural arterial roadway should be considered when the Average Daily Traffic (ADT) reaches 8,700 vehicles. At this volume, a two-lane highway is considered a high-density highway with stable flow and operating at a LOS "C." Only small increases in traffic volume will cause operational delays. Currently, 90 percent of the rural segments within the 48-mile (77-km) study corridor have traffic volumes exceeding 8,700 ADT. By 2028, almost all rural segments are projected to exceed the 8,700 ADT threshold by two to four times. The eight improvement alternatives carried forward for detailed study will provide the needed capacity and level of service for the corridor's current and projected traffic volumes.

The improvement alternatives will reduce the number of crashes along STH 26, with the most substantial reduction of crashes being in the urban sections. Both expressway and freeway access control standards will reduce the number of traffic conflicts and potential for crashes. The separation of traffic from two to four lanes will increase gap distances and provide more passing opportunities, which will reduce intersection and driveway entrance related crashes, as well as head on, rear end, and angle crashes and other variable speed crashes.

A four-lane rural divided roadway with expressway and freeway access control standards for the improvement alternatives will permit relatively unimpeded traffic flow of 55-65 mph (89-105 km/h) along the majority of the STH 26 corridor. The exceptions would be the areas of STH 26 that approach IH 90 at Janesville and IH 94 at Johnson Creek. In these areas it is reasonable to expect a slow down in traffic operations as a major STH arterial connects to a major Interstate Highway.

The improvement alternatives provide a functionally continuous facility throughout the entire project length. They also are consistent with the *Corridors 2020* plan, which designates STH 26 as a Connector Route. STH 26 would function effectively as a regional highway for transporting goods to regional, statewide, and national destinations.

To a large extent, the improvement alternatives make use of the existing right-of-way, which will minimize the disturbances to adjacent properties and minimize the number of farmland severances and other property severances. By relieving congestion and providing interchange access at high volume crossroads, area accessibility and safety will be improved.

A disadvantage of the improvement alternatives will be the effects on the natural and human environment that result from any major project of this size. Farmland, business property, and residential property will be acquired for highway purposes. Although the additional right-of-way required would be minimized, a number of homes and businesses along STH 26 will need to be relocated. Another disadvantage of these alternatives will be the cost required to construct a project of this size.

With the construction of bypasses, the existing STH 26 route in Milton, Jefferson, and Watertown will become a local road and will need minor spot improvements to have adequate capacity to carry the projected remaining traffic volumes at a minimum LOS “D” in 2028.

In summary, the eight improvement alternatives will meet the purpose and need requirements of this project while minimizing impacts to the natural and human environment through careful design. Each will address capacity and level of service, problems associated with safety, and will provide system continuity and roadway function consistent with a route of national, state, regional and local importance.

The following sections discuss each of the improvement alternatives in terms of the corridor’s three study segments.

2.3.2.1 South Segment (Segment 1)

The south segment detailed study alternatives are described below and shown in [Figure 2.3.2.1](#) and [Exhibit 5](#).

2.3.2.1.1 Alternative S2

Alternative S2 generally follows the existing highway but with a relocated alignment crossing through the City of Milton that was developed to avoid impacts to several historic properties, South Goodrich Park, North Goodrich Park, and East Elementary School associated with the existing corridor. From Janesville, this alternative would follow the existing rural 4-lane divided roadway northeast to about Town Line Road. The corridor would then continue northeast on new alignment and curve to intersect STH 59-East approximately 3,500 feet (1,070 m) east of existing STH 26, the Milton House and other historic sites, the two parks, and the elementary school. North of STH 59-East, the alignment would curve northwest and cross the existing STH 26 corridor about 1,500 feet (460 m) north of STH 59-West, avoiding two golf courses and residential subdivisions. A grade separation crossing of existing STH 26 is proposed to allow the existing corridor to remain in place, providing local access to numerous residential properties and the two golf courses located north and east of the city. This alternative would then curve northerly, remaining about 1,300 feet (400 m) west of the existing STH 26 corridor until rejoining the corridor near John Paul Road. Diamond interchanges are proposed southeast of the city at a relocation of STH 59-East to provide better access between Janesville and Whitewater, and north of the city at a proposed extension of Bowers